


## PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 11 MAR 2005
WIPO PCT

Applicant's or agent's file reference PSOC072WO	<b>FOR FURTHER ACTION</b> See Form PCT/PEA/416	
International application No. PCT/EP2004/003600	International filing date (day/month/year) 05.04.2004	Priority date (day/month/year) 29.04.2003
International Patent Classification (IPC) or national classification and IPC G06K7/10, G07D7/12		
Applicant SICPA HOLDING S.A. et al		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>		
Date of submission of the demand  23.10.2004	Date of completion of this report  10.03.2005	
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Bhalodia, A  Telephone No. +49 89 2399-7779	



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/EP2004/003600

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

**Description, Pages**

1-35 as originally filed

**Claims, Numbers**

1-22 as originally filed

**Drawings, Sheets**

1/6-6/6 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing *(specify)*:
  - ☐ any table(s) related to sequence listing *(specify)*:
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing *(specify)*:
  - ☐ any table(s) related to sequence listing *(specify)*:

\* If item 4 applies, some or all of these sheets may be marked "superseded."

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-22
	No: Claims	
Inventive step (IS)	Yes: Claims	2,4,6,10,14,16-18,22
	No: Claims	1,3,5,7-9,11,12,13,15,19-21
Industrial applicability (IA)	Yes: Claims	1-22
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

Re Item V.

- 1). The following document (D) is referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: WO 02 31780 A  
D2: US 5 743 633 A  
D3: US 5 586 212 A  
D4: US 2002 0031266 A

- 2). The application does not meet the requirements of Art. 6 PCT, because **claim 1** is not clear.

- 2.1) The relative term "wide-angle illumination" used in **claim 1** has no well-recognised meaning and leaves the reader in doubt as to the meaning of the technical features to which it refers, thereby rendering the definition of the subject-matter of said claim unclear. For example in D2, the wide angle capability bar code illuminator disclosed has the effect to generate a zone of illumination that is tailored to a specific bar code geometry (col.2 l. 44-46); the wide angle illumination in D2 has not the same meaning as the wide angle illumination of the description which allows to diffusely illuminate a part of a surface simultaneously under all incidence angles.

- 2.2) The term 'optionally' used in **claim 1** (steps c) and f)) leaves the reader in doubt as to the scope of claim 1, thereby rendering the definition of the subject-matter of said claim unclear. The feature following this term was considered as having no limiting effect on the scope of claim 1.

- 3). The present application does not meet the requirements of Article 33(3) PCT, because the subject-matter of **claims 1,13** does not involve an inventive step.

- 3.1). Document D1 (the references in parentheses applying to this document), which is considered to represent the most relevant state of the art, discloses a method for determining the authenticity of an item (170) such as security document, a valued good or a packaging, the item (170) carrying a marking (page 35, par. 3) exhibiting a viewing-angle dependent light reflection spectrum (page 1, par 1), the method comprising the steps of

- a) illuminating said marking with at least a first light source having first spectral characteristics (page 5, par.2);
- b) collecting light reflected by said marking at least at two predefined different observation angles with respect to the plane of the marking, and measuring its respective intensity (page 4, par. 5);
- d) illuminating said marking with at least a second light source having second spectral characteristics (page 5, par. 2);
- e) collecting light reflected by said marking at least at two predefined different observation angles with respect to the plane of the marking, and measuring its respective intensity (page 4, par. 5);
- g) comparing said measured intensity values of steps b) and e) with previously stored corresponding reference values (page 17, par. 2]) according to a predefined algorithm (page 39, par. 3 ), and deriving a authenticity indicator from the comparison result using a pre-established decision criterion (page 29, lines 23-27).

from which the subject-matter of claim 1 differs in that the illumination is a wide angle illumination.

The problem to be solved by the present invention may therefore be regarded as to illuminate the marking simultaneously under variable incidence angle in order to get a uniform illumination. The solution proposed in **claim 1** of the present application cannot be considered as involving an inventive step (Art. 33(3) PCT) for the following reasons:

An optical wave guide is described in document D3 as providing the same advantages as in the present application. Light rays are incident on the scanning area at angles in the range of about 40° to 85°(col.7 l.17-19). The skilled person would therefore regard it as a normal design to include this optic in the apparatus for detecting OVM described in document D1 in order to solve the problem posed.

- 3.2) It should be noted that, D1 (page 17 par. 2) discloses 'pre-storing different values for different pre-measured samples' so that the features of step c) and f) in **claim 1** could not form the basis of a new allowable independent claim. Even without the term 'optionally' the subject matter of claim 1 does not involve an inventive step.
- 4). What has been said above with reference to "method" claim 1 applies to "device"

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(SEPARATE SHEET)**

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**claim 13** mutatis mutandis.

- 5). The features set out in dependent **claims 3,5,7-9,12,13,15,19-21** are known from D1 so that the subject matter of these claims could not form the basis of an inventive independent claim.
- 6). The feature set out in **claim 11** is known from D4 (col.3, l.6-10).
- 7). If the application is pursued and new claims are filed the indications listed below should be followed:

The applicant should indicate in the letter of reply the difference of the subject-matter of the new claim vis-à-vis the state of the art and the significance thereof. Any argument showing the presence of an inventive step should be mentioned in the letter of reply.

To meet the requirements of Rule 5.1(a)(ii) PCT, the documents D1,D2,D3 and D4 should be identified in the description and the relevant background art disclosed therein should be briefly discussed.

The features of the claims should be provided with reference signs placed in parentheses to increase the intelligibility of the claims (Rule 6.2(b) PCT). This applies to both the preamble and characterising portion.

It is to be noted, that at present **claims 1 and 13** reflect the common concept linking together the dependent claims. During the revision of the claims, care should be taken to the unity of invention (R.13 PCT).